



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/595,639

05/02/2006

Mikio Fukuda

SAIT-4544

3886

5409 7590 09/18/2009
SCHMEISER, OLSEN & WATTS
22 CENTURY HILL DRIVE
SUITE 302
LATHAM, NY 12110

EXAMINER

NI, SUHAN

ART UNIT

PAPER NUMBER

2614

MAIL DATE

DELIVERY MODE

09/18/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/595,639	FUKUDA, MIKIO	
	Examiner	Art Unit	
	Suhan Ni	2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-10 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2614

DETAILED ACTION

1. The Art Unit location of your application in the PTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Group **Art Unit 2614**.

2. This communication is responsive to the preliminary amendment filed 5/2/2006.

Election/Restriction

3. Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-2, drawn to the structures/structural elements of a bone-conduction device characterized by comprising: a yoke, which carries a voice coil and a magnet; and, a diaphragm disposed on said yoke through a narrow gap formed therebetween; wherein **said diaphragm is provided with a center opening** in which a plate yoke is disposed, and said plate yoke is provided with a diaphragm abutting portion which abuts against said diaphragm, wherein said diaphragm abutting portion has its outer end edge laser-welded to said diaphragm, classified in class 381, subclass 151;
- II. Claims 3-4, drawn to the structures/structural elements of a bone-conduction device characterized by comprising: a yoke, which carries a voice coil and a magnet; and, a diaphragm disposed on said yoke through a narrow gap formed herebetween; wherein **said diaphragm has its opposite ends bent to form bent portions**, wherein said bent portion is fixedly mounted on an outer side surface of a diaphragm fixing wall of said yoke, classified in class 381, subclass 151;

Art Unit: 2614

- III. Claims 5-6, drawn to a method of manufacturing a bone-conduction device comprising: a yoke, which carries a voice coil and a magnet; and, a diaphragm disposed on said yoke through a narrow gap formed therebetween, the improvement which comprises **the step of laser-welding an outer end edge of a diaphragm abutting portion of a plate yoke to said diaphragm**, wherein said diaphragm is provided with **a center opening**, and said plate yoke is disposed in said center opening of said diaphragm, classified in class 29, subclass 594;
- IV. Claims 7-10, drawn to a method of manufacturing a bone-conduction device comprising: a yoke, which carries a voice coil and a magnet; and, a diaphragm disposed on said yoke through a narrow gap formed therebetween, the improvement which comprises the steps of: **bending opposite ends of said diaphragm to form bent portions**; and, **fixing said bent portion to an outer side surface of a diaphragm fixing wall of said yoke**, classified in class 29, subclass 594.

The inventions are distinct, each from the other because of the following reason:

Inventions Group III-IV and Group I-II are related as **process of making and product made**. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP ' 806.05(f)). In the instant case the process can be performed by a different means.

Art Unit: 2614

Because these inventions are distinct for the reasons giving above and have acquired a separate status in the art as shown by their different classifications, restriction for examination purposes as indicated is proper.

Applicants are advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

4. This application contains claims directed to the following **patentably distinct species** of the claimed invention:

- I. Claims 1-2, drawn to the structures/structural elements of a bone-conduction device characterized by comprising: a yoke, which carries a voice coil and a magnet; and, a diaphragm disposed on said yoke through a narrow gap formed therebetween; wherein **said diaphragm is provided with a center opening** in which a plate yoke is disposed, and said plate yoke is provided with a diaphragm abutting portion which abuts against said diaphragm, wherein said diaphragm abutting portion has its outer end edge laser-welded to said diaphragm,
- II. Claims 3-4, drawn to the structures/structural elements of a bone-conduction device characterized by comprising: a yoke, which carries a voice coil and a

Art Unit: 2614

magnet; and, a diaphragm disposed on said yoke through a narrow gap formed herebetween; wherein **said diaphragm has its opposite ends bent to form bent portions**, wherein said bent portion is fixedly mounted on an outer side surface of a diaphragm fixing wall of said yoke.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, no claim has been found generic.

5. This application contains claims directed to the following **patentably distinct species** of the claimed invention:

III. Claims 5-6, drawn to a method of manufacturing a bone-conduction device comprising: a yoke, which carries a voice coil and a magnet; and, a diaphragm disposed on said yoke through a narrow gap formed therebetween, the improvement which comprises **the step of laser-welding an outer end edge of a diaphragm abutting portion of a plate yoke to said diaphragm**, wherein said diaphragm is provided with **a center opening**, and said plate yoke is disposed in said center opening of said diaphragm,

IV. Claims 7-10, drawn to a method of manufacturing a bone-conduction device comprising: a yoke, which carries a voice coil and a magnet; and, a diaphragm disposed on said yoke through a narrow gap formed therebetween, the improvement which comprises the steps of: **bending opposite ends of said diaphragm to form bent portions**; and, **fixing said bent portion to an outer side surface of a diaphragm fixing wall of said yoke**.

Art Unit: 2614

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, no claim has been found generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Applicants are advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement is traversed (37 CFR 1.143).

Art Unit: 2614

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Suhan Ni** whose telephone number is **(571)-272-7505**, and the number for fax machine is **(571)-273-7505**. The examiner can normally be reached on Monday through Thursday from 10:00 am to 8:00 pm. If it is necessary, the examiner's supervisor, **Curtis A. Kuntz**, can be reached at **(571)-272-7499**.

7. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (**PAIR**) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov/>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

8. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is **(571)-272-2600**, or please see <http://www.uspto.gov/web/info/2600>.

/Suhan Ni/
Primary Examiner, Art Unit 2614